

# **Creating a Clean Energy Economy**

President Obama has taken unprecedented action to ensure that America wins the race for clean energy jobs and to combat global climate change. Historic investments in clean energy will create jobs today, the industries of the 21<sup>st</sup> century, and the foundation for long-term economic growth.

### **Clean Energy Economy**

This Administration is creating a clean energy industry that's made in America, works for America and creates hundreds of thousands of jobs for America. Through the Recovery Act, the Administration has invested more than \$90 billion in clean energy – the largest energy investment in American history – and put America back in control of its energy future. New tax credits and loan guarantees have sparked manufacturing of wind turbines, solar panels and electric cars here at home, not in China or India. Investments in over 44 states will double our renewable energy capacity by 2012 and have already launched a new, clean energy industry in America to make America more energy independent. As the BP oil spill this summer reminded us, the time to embrace a clean energy future is now.

### Expanding Clean Energy to Historic Levels

The American Recovery and Reinvestment Act has put us on track to meet the President's goal of doubling our renewable power generation capacity -- including solar, wind and geothermal – by 2012, enough to power one in seven homes in America. By leveraging private investment and prioritizing the rapid, responsible development of renewable energy projects, this will produce as much as \$200 billion in clean energy projects and create hundreds of thousands of new jobs at projects such as the worlds largest solar thermal power plant being built in California These investments have enabled significant growth in domestic manufacturing and will double our capacity to manufacture the components of renewable energy installations, such as solar panels, wind turbines and batteries, by 2012.

### • Making Homes More Energy Efficient

The Administration is making the largest single investment in home energy efficiency in U.S. history. Over 200,000 homes have already been weatherized, saving families money on their heating and cooling bills and employing over 13,000 carpenters, electricians and other workers, and we are on track to weatherize 600,000 homes by March 2012. Additionally, the "Recovery through Retrofit" initiative will eliminate key barriers in the home retrofit industry by providing consumers with access to straightforward information about their home's energy use, promoting innovative financing options to reduce upfront costs, and developing national standards to ensure that workers are qualified and consumers benefit from home retrofits. The BetterBuildings program will give energy tune ups to 200,000 commercial and residential buildings on a neighborhood-by-neighborhood basis by 2013.

### • Investing in Advanced Transportation Systems

By partnering with industry, the Administration is working to transform the transportation sector and reduce our dependence on foreign oil. We are investing up to \$12 billion in projects including

plug-in hybrids, all-electric vehicles, and the infrastructure to power them, as well as the next generation of biofuels—clean, renewable and domestically-produced fuel. Over the next six years, three new electric vehicle plants—the first ever in the U.S.—and 30 new battery and other electric vehicle manufacturing plants will be fully operational. And we have set a goal of tripling America's biofuels production in the next twelve years. This investment will ensure that the clean, comfortable, and affordable cars of the future are made in America.

Additionally, President Obama has announced the first ever joint fuel economy/greenhouse gas emissions standards for cars and trucks and launched the process to create the first-ever efficiency and emissions standards for medium- and heavy-duty trucks.

## • Modernizing Our Electricity infrastructure

The Administration invested \$11 billion from the Recovery Act as a down payment on modernizing the Nation's electric system. A smarter electric grid will give families and businesses more control over their energy use and energy bills, improve the reliability of our electric system, and allow greater use of renewable energy sources like solar and wind power. More than two million smart meters have been installed so far. Eventually, this investment will directly deploy 18 million smart meters, along with 877 transmission line sensors. These projects, combined with private investment, will put us on pace to deploy 40 million smart meters over the next few years.

# Cleaning up Coal

The Administration is committed to making coal a clean part of our energy future. By investing in carbon capture and storage technology, we can create jobs, reduce carbon pollution, and lead the world in an emerging new industry. The Department of Energy is currently pursuing multiple demonstration projects using close to \$5 billion in Federal funds, matched by approximately \$7 billion in private investments. Those investments will begin to pave the way for the widespread, cost-effective deployment of CCS within ten years, with a goal of bringing five to ten commercial demonstration projects online by 2016.

### • Revitalizing the American Nuclear Industry

The Administration is revitalizing the nation's nuclear power industry. The Department of Energy has offered conditional commitments for a total of \$8.3 billion in loan guarantees for the construction and operation of two new nuclear reactors at a plant in Burke, Georgia. The project is scheduled to be the first U.S. nuclear power plant to break ground in nearly three decades and is projected to create 3500 construction jobs and 800 permanent jobs. The Department has also offered a conditional commitment for a front-end nuclear facility that will supply uranium enrichment services for the U.S. nuclear power industry. The \$2 billion loan guarantee will support AREVA's Eagle Rock Enrichment Facility near Idaho Falls, Idaho.

### • Expanding Appliance Efficiency Standards

The Administration is setting long overdue standards for everyday appliances like refrigerators, microwaves, and washer/dryers. The Department of Energy has issued or codified new efficiency standards for more than twenty different products since President Obama took office, compared to the previous average of just one per year. These new standards alone are expected to save consumers between \$250 and \$300 billion on their energy bills through 2030.

#### • Leading in Sustainability

President Obama signed an Executive Order on Federal Sustainability, committing the Federal Government to lead by example in increasing energy efficiency, reducing oil use in the Federal

fleet, and expanding the use of clean energy sources. These efforts will reduce Federal government greenhouse gas emissions 28% below 2008 levels by 2020.

## • Re-establishing U.S. leadership in Science, Innovation and Technology

The Administration is leading the way to restore science to its rightful place by boosting funding advanced R&D by our national labs, universities, and innovative small businesses, as well as energy frontier research centers and innovation hubs. The Recovery Act funded, for the first time, the Advanced Research Projects Agency - Energy (ARPA-E) which has supported 117 companies that are accelerating the pace of innovation and laying the foundation for the next generation of breakthrough energy technologies. The Department of Energy is creating a series of Innovation Hubs to focus on advanced energy technologies such as fuels directly from sunlight.

### **Climate Change**

The Obama Administration is committed to leading the charge to reduce the dangerous pollution that causes global warming, and to make the investments in the clean energy technology that will power sustainable growth in the future.

### • International Leadership

Under President Obama's leadership, the international community has taken significant measures toward a global solution to climate change, including a commitment by G-20 and APEC nations to eliminate fossil fuel subsidies; fostering bilateral energy and climate partnerships with China, India, Mexico, Canada and others; joining Canada and Mexico in proposing to phase-down HFCs (hydrofluorcarbons), a very potent greenhouse gas, in developed and developing countries; committing \$1 billion to help countries develop and implement plans to reduce global greenhouse gas emissions from deforestation and forest degradation; leading Arctic nations in efforts to reduce black carbon (soot) emissions that contribute to climate change; and reaching an historic accord at the Copenhagen climate summit that includes transparently implemented emission reductions by all major economies that lays the foundation for international action for years to come. The President launched the Major Economies Forum creating a new dialogue among developed and emerging economies to combat climate change and promote clean energy. The Administration also hosted the first-ever Clean Energy Ministerial – the first time in history that ministers of the world's largest economies have gathered to focus exclusively on clean energy.

### • Monitoring Emissions

For the first time, the U.S. will catalogue greenhouse gas emissions from large emission sources – an important initial step toward measurable and transparent reductions.

#### • Climate Change Science and Education

The Administration is pursuing a government-wide effort to understand and respond to climate change. The U.S. Global Change Research Program is a collaborative effort involving 13 Federal Agencies that works to evaluate the potential impact of climate change on the United States, to reduce U.S. greenhouse gas emissions, and to grow a clean energy economy.